Access Control Card Reader Installation Instructions

Version: 1.0 Date：2019.10.21

Change History

Version	Date	Description
V1.0	2019-10-21	The first official release.

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The control units and accessories are intended to be installed in accordance with the following:
1. The National Electrical Code, ANSI/NFPA 70.
2. Local Authority having Jurisdiction.
3. Input power must be power limited, Class 2.

The system is evaluated for the following performance levels:
- Destructive Attack - Level I
- Line Security - Level I
- Endurance - Level IV
- Standby Power - Per rating of the power supply

FCC ID: 2AKARR330M-GU

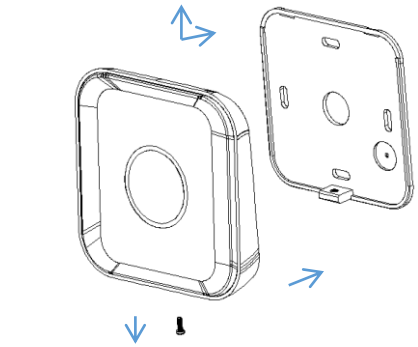
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

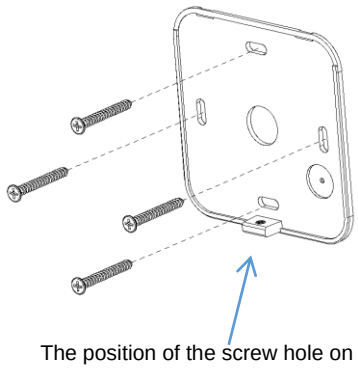
一、Installation Diagram

1)



As shown in the figure above, remove the screw first, then remove the back cover from the device.

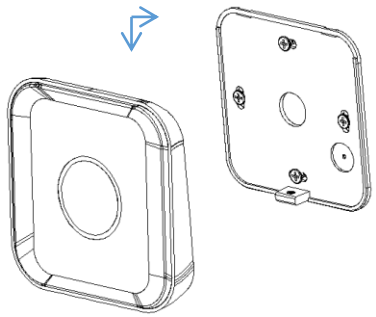
2)



The position of the screw hole on the back cover is facing down.

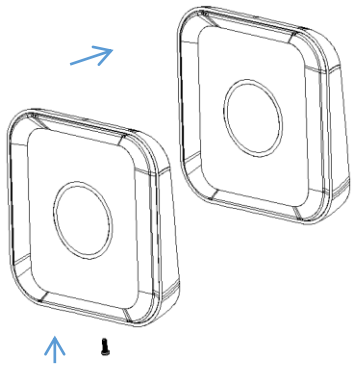
Align the screw holes of the back cover with the drilled holes on the wall and fix the back cover to the wall with screws.

3)



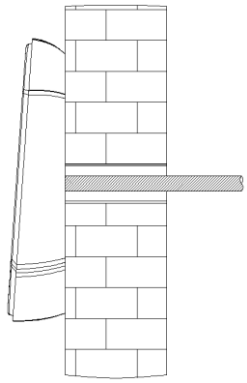
Clear and connect the lines and install the device on the back cover.

4)



Secure the device to the back cover with the screws removed in step 1.

5)



Equipment cable installation through the wall.

二、Wiring Instructions

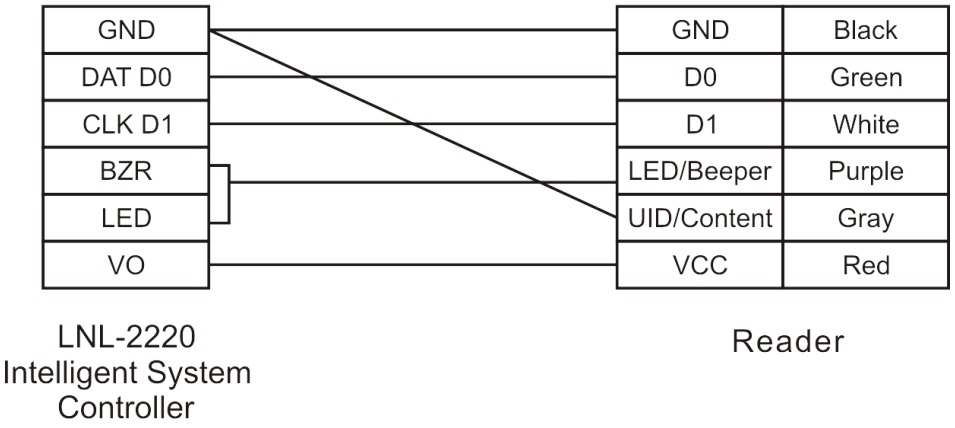
Introduce how the card reader is connected to the LNL-2220.R330M-GU Access Control Card Reader Wiring Definition： Red: VCC, Black: GND, White: Wiegand D1 Green: Wiegand D0, Purple： LED/Beeper, Gray: UID/Content

1、 The gray line of the reader is connected to the GND of the controller: The card reader reads the physical card number of the card.

2、 The gray line of the card reader is not connected to GND of the controller: The card reader reads the contents of the Furans National Secret Card.

Refer to the wiring diagram below:

READER 1 Part



三、 Product Description

3.1 Product Picture

3.2 Product Introduction

- R330M-GU is a metal access control card reader for keyless non-contact RF IC cards based on Fudan National Secret Technology. The CPU part of the card reader hardware adopts high-performance integrated chip, and the radio frequency part adopts the high-performance radio frequency chip designed by our company. It has the characteristics of fast card reading speed and stable card reading. It adopts 3DES international standard algorithm to prevent card copied, strong encryption and high security.
- Built-in support for the SM1 algorithm PSAM module to ensure the absolute

encryption of the card. The algorithm has been approved by the National Secret Service. Due to the non-public algorithm and its high security and high stability, the national secret card reader is widely used in various radio frequency identification applications such as access control, attendance, charging, anti-theft, and patrol. .

- Supports flexible configuration of various output parameters of the card reader through the configuration card, such as card key, card number output format, Wiegand mode, card reading mode, and the like. It can fully adapt to the individual application requirements of the card reader in different application environments and different decoration environments.
- Providing independent Fudan national secret card issuance software system, the third-party access control system can realize the seamless connection between Fudan national secret card and the third-party access control management system without any modification.

3.3 Product Feature

- Support national secret SM1 algorithm, high security.
- PSAM module with built-in SM1 algorithm, support reading CPU card file data.
- High-performance high-speed processor.
- Supports flexible configuration of various output parameters of the read head through the configuration card.
- The card number distance of the national secret user card is 4cm, reading content distance is 3cm. (Related to different work environments and different cards.)
- The physical card number is read within the effective distance and the data reception time is less than 80ms.
- Reading the national secret card content within the effective distance data

receiving time is less than 200ms.

- Anti-static, anti-missing and other multiple protection design.
- Anti-metal shield and card reader have strong anti-interference ability.

3.4 Product Parameter

Parameter	Description
Product Standard	ISO/IEC14443A
Support Card	● Support reading the contents and card number of Fudan National Secret User Card ● Read the physical card number of S50, DESFire, Ultralight, NTAG, CPU
Read Card Distance	Greater than 3cm. (Related to different work environments and different cards.)
Product Size	93.3mmx93mmx13.3mm，Deviation±3mm
Output Format	Support WG26, WG34
Cable Outlet Length	220mm±15mm
Frequency Band	13.56MHz
Power Supply	DC12V（±5%）
Standby Current	less than 80 mA
Working Current	less than 200mA
Operating Temperature	0℃~+49℃
Storage Temperature	0℃~+49℃
Working Humidity	15%~85%
Transmission Distance	less than 30m(98.5ft)
Wiring Diameter	AWG22
Wiring Definition	Red: VCC, Black: GND, White: Wiegand D1 Green: Wiegand D0, Purple：LED/Beeper, Gray: UID/Content